

PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY.

MEETING OF FEBRUARY 3.

A regular meeting of the New York Entomological Society was held February 3, 1914, at 8:15 P. M., in the American Museum of Natural History, Vice-President H. G. Barber in the chair, with twenty-two members and five visitors, including Dr. E. A. Chapman and Mr. J. A. Weber of the Linnæan Society, present.

Dr. Philip Dowell, of Port Richmond, N. Y., was proposed for active membership by Mr. Davis and, the by-laws being suspended for the purpose, was immediately elected.

Mrs. Annie Trumbull Slosson, through Mr. Davis, communicated a press notice of the meeting, in which the Coleoptera to be discussed appeared as Cleopatra.

Mr. Leng read a paper on "Collecting Insects in Cuba" referring especially to the Coleoptera collected on his recent visit to the island with Dr. Lutz.

Mr. Groth exhibited his collection of the Papilios of Cuba, commenting on the comparative rarity of males. The species shown were:

<i>Papilio columbus</i> H. Sch.	<i>Papilio celadon</i> Lucas.
<i>devilliers</i> H. Sch.	<i>caiguanabus</i> Poey.
<i>polydamas</i> Linn.	<i>aristodemus</i> Esper.
<i>thoas oviedo</i> Gundl.	<i>andremon</i> Hübn.
<i>pelans</i> Fabr.	<i>androgeus</i> Cram.
<i>oxyinius</i> Hübn.	

Dr. Lutz exhibited with the radiopticon, about 75 photographs and pictures of Cuban scenes, describing his visits to Guana, Zaza del Medio and Santiago, confirming what had been said as to three sections of Cuba. He dwelt particularly upon his visit to Guantanamo, where he was fortunate in meeting Mr. Charles T. Ramsden, the principal living Cuban entomologist, and with his guidance was able to collect in the tropical jungle of the eastern end of the island.

Mr. Davis presented portraits of Dr. Henry Skinner to the Society's collection.

During the service of refreshments, Mr. Weeks entertained the Society with newspaper articles on entomological matters, and exhibited part of his collection of *Oodes* and other Carabidæ obtained years ago at the foot of the Palisades, a locality Mr. Weeks said which was now much altered, so that the best place for such species was probably the border of the marshes on the south shore of Long Island.

MEETING OF FEBRUARY 18.

A regular meeting of the New York Entomological Society was held February 17, 1914, at 8:15 P. M., in the American Museum of Natural History, President Raymond C. Osburn in the chair, and ten members present.

Mr. Barber read a paper on "Some Interesting Results of Collecting Hemiptera in Virginia" in which he referred to the light thrown upon insect distribution by his collections in 1911 near Herndon, and in 1913 near Vienna, about 12 miles west of Washington, D. C., where he found a rolling sandy truck farming country with patches of deciduous and of coniferous forest, not differing greatly from southern New Jersey.

This region seems to be the southernmost limit for many boreal species and equally the northernmost limit for some austral species, while a few western species also reach it, perhaps via the Cumberland Gap and the Potomac River. After giving instances of each class, Mr. Barber described the three avenues of dispersal for Sonoran insects as outlined by Webster and referred particularly to the path via the Gulf States, and thence east of the Great Fault by which such species have reached the Atlantic coast, dwelling especially on the Harlequin Cabbage Bug (*Murgantia histrionica*) which with Mr. McAtee he had found abundant at Chesapeake Beach on a wild cruciferous plant. There also he had found many species by pulling up the grasses that grew above high tide mark and shaking the roots over a cloth.

Reviewing the principal species that were captured during the two summers, Mr. Barber pointed out repeatedly that often they were austral species found here rarely if at all; and that the abundance of certain groups had led to the Washington entomologists giving those groups special attention, as Nathan Banks has done in *Emesa* and Mr. Heideman in the *Tingidæ*.

The paper was discussed by Messrs. Comstock, Davis, Leng and Dr. Osburn, the latter recalling that about 20 years ago the harlequin bug was abundant in Central Ohio, but for two years only, a severe winter apparently preventing its becoming a permanent resident, as it is in southern Ohio and Indiana.

Mr. Davis showed by Smith's List, page 136, that only in 1896 has this insect ever reached destructive numbers in New Jersey.

Mr. Davis exhibited a southern cricket, *Cycloptilum squamosum* Scudder, which he had found on Long Island, and read a memorandum relating thereto which will be printed in Short Notes. He also exhibited a pamphlet on Friendly Insects of Australia, and one issued by the South African Central Locust Bureau, in which it was stated that brown locust eggs hatched after 3½ years' retention, a period that might be exceeded if the eggs had lain undisturbed in the soil.

Mr. Leng read a note from Mr. Norman S. Easton, describing the locality in which he had found *Canthydrus puncticollis*, on submerged lumber in slowly moving swamps, see page —; also one from Charles Dury, in reference to *Cioida*, which will be found in Short Notes; and a letter from Dr. W. E. Britton, in reference to *Coccinellida* being possibly double brooded.

Mr. Davis said that *Axion tripustulatum*, which is abundant at Lakehurst on *Kermes* infested oaks in July and August, was probably single brooded, as it was rarely found at other seasons.

Mr. Comstock referred to *Liphya brassolia* and read a passage from Dr. Wheeler's work on ants relating thereto.

Mr. Dow spoke of the attractiveness of Joe Py weed when in bloom, for insects, especially *Trichodes* and *Amphicoma*.

MEETING OF MARCH 3.

A regular meeting of the New York Entomological Society was held March 3, 1914, at 8:15 P. M., in the American Museum of Natural History, President Raymond C. Osburn in the chair, and fourteen members present.

Dr. Osburn, under the title of "Remarks on *Penthesilia* and some related Syrphid genera" exhibited his collection and spoke at length of the taxonomy of these flies with frequent reference to the larval life.

Messrs. Davis, Woodruff and Schaeffer discussed this paper, especially in reference to the early appearance of *Penthesilia verbosa* on willow blooms, which, while well known, was in this vicinity not frequent; Dr. Osburn added that as a matter of fact, most of his specimens of this species had been donated by loving friends.

Mr. Dow under the title of "About Boisduval" gave an interesting picture of the life and entomological activity of Jean Baptiste Alphonse Dechauffour de Boisduval, born 1799, died 1879, a physician, once curator of the Dejean collection, author of many works on Lepidoptera and Coleoptera, including his joint work with the elder Leconte on the Butterflies of America, in which appear the drawings and ecological notes of John Abbot, of Georgia. After the retirement of Dejean, Dr. Boisduval, who came of a land-owning Norman family, devoted himself to medicine, but accumulated a great collection as well, in which were included the Californian insects collected by Lorquin, and became the highest authority on identification of butterflies. His collection passed into the possession of Charles Oberthür, and after three-quarters of a century of life, the aged doctor retired to the home estate at Ticheville, there perhaps to watch, as Mr. Dow suggested, his grandchildren, the trees, the sky and the butterflies that pass uncaught "when it's apple blossom time in Normandy." His death notice in the *Annales* of the Entomological Society of France is by Charles Oberthür and leaves no salient facts to be added.

Mr. Comstock read a paper on "The Californian *Lycanida* described by Boisduval," which will be printed in the *JOURNAL*, exhibiting his collection and the recent work by Oberthür in which the Boisduval types are figured in colors, as well as the earlier publications on the group. In the course of his remarks he referred to the assistance of Mr. Watson and his concurrence in the synonymy proposed.

The paper was discussed by Messrs. Davis, Woodruff, Watson, Schaeffer and Dr. Osburn, and Mr. Comstock's opinion as to the various names for our own little blue butterfly asked.

Mr. Comstock said *Cyaniris ladon* was surely its specific name, but the standing of the names *marginata*, *lucia*, *violacea*, for its seasonal forms was still in dispute; some collectors holding that each of these represents a distinct succession of Spring forms appearing about ten days apart, others that *marginata* and *lucia* cannot be separated, others that *violacea* also is inseparably connected by intergrades; all however agree in calling the summer brood in which the spots are almost obsolete, *neglecta*. Mr. Comstock said that the spring larvæ feed on the developing flower buds of benzoin, wild cherry, viburnum, etc., and are difficult to raise, though W. H. Edwards had succeeded in doing so. The summer form, *neglecta*, feeds on *Ceanothus*. He added that the number of broods probably varied in different seasons, the allied species *comyntas* having certainly four broods in some seasons. Further south the succession of spring forms differs from that observed near New York, and *pseudargiolus* becomes a predominant form at certain seasons.

Mr. Davis spoke of the similar difference observed in spring form of luna moth.

Mr. Leng exhibited specimens of *Arthromacra anea* and a different species of the same genus collected by Col. Wirt Robinson, in Nelson Co., Va., and communicated by him in which a bright green color was accompanied by difference in pronotal punctuation, and relative length of antennal joints, as pointed out by Col. Robinson, who also noticed that there was no commingling of the two forms in copulation.

Mr. Davis exhibited photographs of Philadelphia Academy of Sciences, and spoke of his kindly reception at a recent meeting of the entomological section and at a meeting of the Feltman Collecting Social, which he had also attended, expressing his admiration for the great work being accomplished in that city by a comparatively small number of men. He said this was doubtless aided by the magnificent library and the facilities for its use, each member being provided with a key so that he can work undisturbed at evening.

Mr. Angell spoke of the metallic colors in *Coptolabrus*, and the crimson hue that was caused by water being applied to the elytral surface, as he discovered in relaxing and remounting, affording another illustration of the mechanical character of the colors.

MEETING OF MARCH 17.

A regular meeting of the New York Entomological Society was held March 17, 1914, at 8:15 P. M., in the American Museum of Natural History, Mr. G. W. J. Angell in the chair and seventeen members present.

Mr. Davis under the title "Remarks on Some Orthoptera from the East Coast of Florida" showed his extensive collection of Floridian Orthoptera and a large number of photographs thrown on the screen by radiopticon. Mr. Davis said that 92 species were taken by Mr. Sleight and himself on their recent visit to the East Coast, and 104 species had been taken on his several

Florida trips. Some of these are new to science, especially among the *Belocephalus* inhabiting the Keys. The insects of this genus cannot fly nor can they travel about very well on account of their clumsy bodies, so they become liable to the influence of isolation, and specific differences can well arise every few hundred miles. Mr. Davis showed by figures the differences in subgenital plates, etc., by which the species are separated. He spoke also of an acrid fluid expelled by one species of walking stick similar to condensed milk in appearance; of an earwig found taking care of her numerous young in her cell; of the Big Lubber Grasshopper, of *Aptenopedes aptera* Scudder chewing half moon holes in scrub palmetto, and of the katydid first described by Beutenmuller, and its song. He described the method of "shining the road" at night as specially productive at Miami, where a road ran through the big hammock and where Mr. Sleight caught *Phrixa maya* (described from Yucatan) for the first time in the United States.

Mr. Mutchler spoke of "Some of the Museum Collections" exhibiting types additional to those already reported, and the system of arrangement of the drawers. He also showed a new species of *Criocephalus* from Cuba.

Mr. Dow gave an "Exhibition of Early Entomological Books" showing the works of Ray, Reaumur, Geoffroy and others, and commenting on the state of the science previous to the time of Linné, spoke particularly of the remarkable work in dissection and drawing of some early Italian authors.

MEETING OF APRIL 7.

A regular meeting of the New York Entomological Society was held April 7, 1914, at 8:15 P. M., in the American Museum of Natural History, President Dr. Raymond C. Osburn in the chair, and seventeen members present.

Mr. Leng read a paper on "West Indian Coleoptera" in which after reciting the methods employed in compiling the list he showed on the blackboard the following comparison of the total number of species recorded in the principal families from the West Indies and from New Jersey, viz.:

	West Indies.	New Jersey.
Rhynchophora	590	429
Chrysomelidæ	364	271
Cerambycidæ	243	197
Scarabæidæ	182	163
Tenebrionidæ	134	65
Elateridæ	123	129
Staphylinidæ	146	257
Carabidæ	113	357
Silphidæ	0	34
Total, including smaller families	2,900	3,042

exhibiting as salient features of the fauna, a comparative wealth in phytophagous species contrasted with a comparative poverty in carnivorous species

and coupled with a development in Tenebrionidæ, more like that of the Sonoran region than that of the Atlantic coast. The total absence of the carrion eating Silphidæ is apparently well established, as well as a characteristic development of certain genera and tribes, like *Leucocera* in the Chrysomelidæ, Exophtalmini in the Rhynchophora and Solenopterini in the Longicornia.

Mr. Leng said the data were insufficient to attempt any comparison with the fauna of South and Central America, beyond the evident intimate relation between that of the islands and the continent and the comparative paucity of species on the islands. In reference to Florida he spoke of the West Indian colony in southern Florida and the existence of boreal forms like *Chlænium niger* in Florida and Cuba, the presence of which might be accounted for if one might assume a former land connection between the two regions.

Mr. Leng also called attention to the changes in family names, necessary to accord with the most recent catalogues, viz. :

Cicindelidæ become part of	Carabidæ
Trichopterygidæ change to	Ptilidæ
Mycetophagidæ change to	Tritomidæ
Trogositidæ change to	Temnochilidæ ¹
Parnidæ change to	Dryopidæ
Dascyllidæ part change to	Dascillidæ
Dascyllidæ part change to	Helodidæ
Elateridæ part change to	Eucnemidæ ²
Throscidæ change to	Trixagidæ
Lampyridæ split into	Lycidæ, Lampyridæ, Telephoridæ
Ptinidæ split into	Ptinidæ, Bostrichidæ
Lucanidæ split into	Lucanidæ, ³ Passalidæ
Cistelidæ change to	Alleculidæ
Anthicidæ split into	Pedilidæ, Anthicidæ, Hylophilidæ
Calandridæ change to	Cossonidæ
Scolytidæ split into	Platypodidæ, Ipidæ

and said that he hoped to discuss the reasons advanced for each change at a later meeting.

These remarks were discussed by Dr. Osburn and Dr. Lutz, the former calling attention to the great depth of water in the Florida Straits, the latter vigorously combatting the possibility of such a land connection, as lacking support from palæontology, geology, botany or any other science. The evidence he said was strong that West Indian distribution between the islands and from the mainland had been a matter of sea-drift, winds, hurricanes and

¹ The name Ostomidæ is preferred by some authors.

² The Elateridæ have been subjected to further subdivisions, in part, perhaps, still open to discussion.

³ The Lucanidæ and Passalidæ are by some authors treated as sub-families of Scarabæidæ, which is then split into a number of sub-families.

particularly natural rafts operating through long geologic time; and the paucity of mammalia was finally a killing argument against a purely theoretical land connection.

Mr. Leng recalled in support of the drift and hurricane theory the fact that specific identity between Floridian and Cuban forms was in fact largely found in the seashore and strong flying insects.

In reference to the relation between West Indian and Yucatan insects. Dr. Lutz cited tables he had prepared from the Petrunkevitch catalogue of Spiders showing only 4 5/10 per cent. of the genera as common to the two regions.

Mr. Harris said he could add to the data on Cicindelidæ, *Tetracha* sp. and *Cicindela trifasciata* from Grand Cayman.

The secretary read a letter from Col. Wirt Robinson pointing out an error in Blatchley's Coleoptera of Indiana requiring the change on page 989 under "a" and "aa" in the synoptic table of *Cyclocephala*, of the words "outer" to "inner."

The secretary also read a letter from Mr. Davis reporting on the experiences of Mr. Barber and himself near Wilmington, N. C.

Mr. Angell stated that he had in his collection a specimen of *Cychrus* (*Spharoderus*) *lecontei* from Franktown, Nev., collected by S. W. Denton. He also called attention to an opportunity to obtain fine series of *Desmocerus auripennis* from Chas. Dury; the specimens having been recently collected by Pilate.

Dr. Lutz spoke of Mr. Grossbeck's journey, at present in progress, through the West Indian islands.

Dr. Love and Professor Bradley also spoke briefly.

MEETING OF APRIL 21.

A regular meeting of the New York Entomological Society was held April 21, 1914, at 8:15 P. M., in the American Museum of Natural History, President Dr. Raymond C. Osburn in the chair, with fifteen members and one visitor present.

Mr. Hall exhibited butterflies caught in the Black Mountains, N. C., in June, 1912, with photographs of the region, which was elevated about 2,300 feet above the sea. He commented on the small number of diurnals, 29 species in all, and spoke of the construction of a logging railroad, from Black Mt. Station into the mountains, which will facilitate collecting in future.

This paper was discussed by Messrs. Schaeffer, Davis, Engelhardt and Leng, all of whom had had some experience in the southern mountains, and it was suggested that it was necessary to collect in varied environments to secure many species, and especially along the summits of the ridges, often more open than their flanks, for butterflies.

Mr. Harris made an "Exhibition of Exotic Genera of Cicindelidæ" showing representations of the tribe Ctenostomini from Madagascar and South America; of the tribe Collyrini from India, China and the Pacific islands;

of the tribe Theratini from the same area, of the tribe Cicindelini, in its oriental subtribes, from New Caledonia, New Holland, Australia, South Asia, Africa, Java and Borneo, of the tribe Megacephalini (to which belongs our *Tetracha*), from Africa; of the tribes Mantichorini and Platychilini from southern Africa. In connection with *Tetracha*, Mr. Harris announced that the species from Everglade, Fla., made known by Mr. Davis, had been identified by Dr. Walther Horn as *T. chevrolati* Chd., never before reported outside of Yucatan.

Mr. Davis said that he had not personally collected the specimens, which were sent to him after his return to New York by the sons of his host at Everglade, Mr. Storter; May, June and July appeared to be their season. This occurrence of a Central American species in southern Florida was paralleled, Mr. Davis said, by the previously recorded capture by Mr. Sleight at Miami of *Phrixia maya*, and possibly by his own capture at Lake Okechobee of a longicorn beetle, *Dorcasta obtusa*, a member of a genus known to occur in Cuba, but more developed in Central America, whence several species have been described.

Mr. Dow read a paper entitled "A Bit of Classification in the Making" in which a letter from Dr. Sharp to Dr. Leconte in reference to the Haliplidæ and other groups was included.

Mr. Dow also spoke of *Phytonomus alfalfa* coming from Dr. Titus, in Utah, and distributed specimens; he also recorded *Malachius æneus* collected by A. B. Champlain near New Haven, Conn.

Mr. Leng called attention to *Gyascutus carolinensis* as recorded from Harbor Island, Bahamas, in C. C. Nutting's "Bahama Expedition" the capture and identification being credited to Professor Wickham.

Mr. Schaeffer said the original description of this species from North Carolina was simply an error, due to the first specimens having reached Dr. Horn in a bottle with Carolinian insects. Subsequent captures have shown its actual habitat to be Sonoran.